Montana DEQ Forest Fire Smoke Advisory August 26, 2007

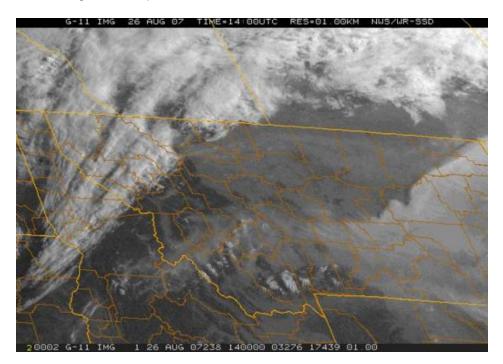
10:00 AM Sunday

FORECAST:

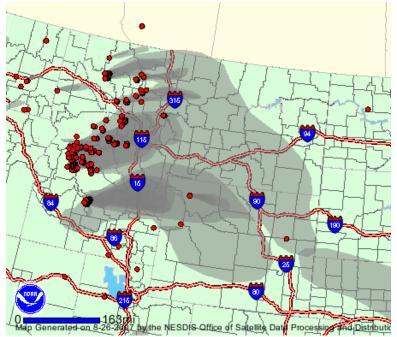
The big plume of smoke that resulted from yesterday's Red Flag conditions and rolled into many communities in Southwestern Montana for a few hours yesterday evening has moved out across south central and eastern Montana and is clearly evident in this morning's satellite photo. Some moderate levels of smoke have remained in the valleys of western Montana.

More Red Flag warnings for hot, dry, and windy conditions are forecast across most of the active fires again today. These conditions are expected produce more of the intense plumes of smoke seen yesterday this afternoon and evening. Transport winds will be westerly most of today and start changing to northwesterly late tonight behind a weak cold front that will start moving into the state this afternoon. Smoke impacts in the Bitterroot Valley and southwestern Montana will be a problem today with those wind vectors. Locally, smoke is expected in the Flathead Valley, the Missoula area, the Rock Creek and Flint Creek areas and the Seeley Lake area. The general haze level will continue to rise today and some temporary surface impacts from the plume aloft are likely across eastern Montana. Direct plume impacts from local fires could be a problem this afternoon and evening. Residents near active fires or experiencing noticeable smoke levels should use the VISIBILITY GUIDELINES to determine smoke levels in their area and guide their activity decisions.

A morning satellite photo centered on Great Falls is illustrated below:



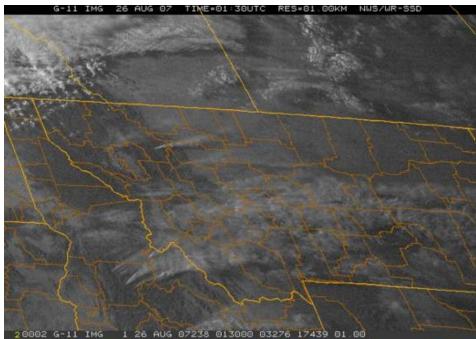
This morning's analysis from NOAA's satellite services division shows the active fires in Montana and the smoke plumes combining and spreading downwind (the analyzed smoke is based on yesterday's satellite coverage, the fire detects are based on last nights satellite coverage).



Red indicates hot spot detected. Grey represents smoke seen by satellite. Fire size is exaggerated for visibility at this scale

To identify individual fires on graphic above go here: http://activefiremaps.fs.fed.us/lg_fire2.php

This satellite photo taken at 7:30 PM last night shows the origin of the plume across central Montana seen on this morning's photo.



This morning's smoke report is below, comparing particulate levels where we have information to MDEQ's Forest Fire health advisory levels.

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10:00 AM Sunday DISCUSSION:

Most of the smoke from yesterday's Red Flag event has stayed aloft and is moving across southcentral and eastern Montana. Some of that smoke will mix down to the surface later this morning. In southwestern Montana, Dillon was at <u>unhealthy for</u>

sensitive until about 6am this morning. Conditions there have improved temporarily to MODERATE but they will be downwind of a lot of smoke all day so the improvement is not likely to last. Moderate smoke levels are hanging around most of western Montana. Smoke draining downslope from local fires in the Bitterroot reached Hamilton at 6 AM. The south end of the Bitterroot is likely to stay smoky until this afternoon. All the rest of the reporting stations are at good this morning. The advisories in the table below represent conditions between midnight and 8 AM and may change substantially through the day. Residents downwind of the active fires and experiencing impacts from residual smoke will need to pay close attention to conditions in their area and use the visibility guidelines to determine current conditions.

John Coefield

Meteorologist

Montana Department of Environmental Quality

Locations and severity of forest fire smoke reports since midnight of the date above at reporting stations.

Real time particulate information is currently available in most of the larger urban areas from several different sources including: DEQ run PM-10 BAMS and PM2.5 BAMS, CS&KT run PM-10 TEOMS, NWS ASOS visibility monitors, and USFS remote access Nephelometers and BAMS.

Updated 10 AM August 26, 2007

These advisories represent conditions between midnight and 8 AM and may change substantially through the day.

substantially tribugh the day.	
<u>HAZARDOUS</u>	
VERY UNHEALTHY	
<u>UNHEALTHY</u>	
<u>UNHEALTHY</u>	Dillon Vis(6)
FOR SENSITIVE GROUPS	
<u>MODERATE</u>	WhitefishT8
	Kalispell T8
	Missoula T24
	Hamilton T1
	Butte T8
	Dillon Vis(2)

T1(x) One-hour TEOM or BAM value (number of values)

T8(x) Eight-hour average TEOM or BAM value(number of values)

T24 24 hour average TEOM or BAM value

Vis(x) Visibility value(number of hours)

Vis(am/pm) Visibility value from twice/day reporting stations

(est) estimate

Local impacts in areas immediately adjacent to active fires are expected to exceed some or all of the advisory levels. DEQ recommends the use of local <u>visibility guidelines</u> to evaluate possible health risks and make informed activity decisions.